CLAIMS

1. A structured nail polish composition comprising at least one liquid organic phase comprising at least one volatile organic solvent, the liquid organic phase being structured by at least one first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

2. A stick nail polish composition comprising a liquid organic phase comprising a volatile organic solvent and a first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

3. A cosmetic composition comprising an organic phase, a first polymer and a second additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters dD, dP and dH at 25°C which

satisfy the following conditions:

$$15\ (J/cm^3)^{1/2} \leq dD \leq 19\ (J/cm^3)^{1/2}$$
$$dP \leq 10\ (J/cm^3)^{1/2}$$
$$dH \leq 10\ (J/cm^3)^{1/2}$$

4. A nail polish composition comprising a liquid organic phase, a first polymer and a second additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters dD, dP and dH at 25°C which satisfy the following conditions:

$$15\ (J/cm^3)^{1/2} \leq dD \leq 19\ (J/cm^3)^{1/2}$$
$$dP \leq 10\ (J/cm^3)^{1/2}$$
$$dH \leq 10\ (J/cm^3)^{1/2}$$

5. The composition as claimed in any one of the preceding claims, wherein the average molar mass of the first polymer is less than 50 000.

6. The composition as claimed in any one of the preceding claims, wherein the heteroatom-comprising units of the first polymer comprise a nitrogen atom.

7. The composition as claimed in any one of the preceding claims, wherein the heteroatom-comprising units are amides.

8. The composition as claimed in any one of the preceding claims, wherein the fatty chains represent from 40 to 98% of the total number of the heteroatom-comprising units and of the fatty chains.

9. The composition as claimed in one of the preceding claims, wherein the fatty chains represent from 50 to 95% of the total number of the heteroatom-comprising units and of the fatty chains.

10. The composition as claimed in one of the preceding claims, wherein the pendent fatty chains are bonded directly to at least one of said heteroatoms.

11. A structured nail polish composition comprising at least one liquid organic phase comprising at least one volatile organic solvent, the liquid organic phase being structured by at least one polyamide with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b), optionally, optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units.

12. A stick nail polish composition comprising a volatile organic solvent and a first polyamide polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units.

13. A cosmetic composition comprising an organic phase, a first polyamide polymer with a weight-average molecular mass of less than or equal to 100 000

comprising a) a polymer backbone having amide repeat units and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units, and a second additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters dD, dP and dH at 25°C which satisfy the following conditions:

$$15\ (J/cm^3)^{1/2} \leq dD \leq 19\ (J/cm^3)^{1/2}$$

$$dP \leq 10\ (J/cm^3)^{1/2}$$

$$dH \leq 10\ (J/cm^3)^{1/2}$$

14. A nail polish composition comprising an organic phase, a first polyamide polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having amide repeat units and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these amide units, and a second additional film-forming polymer, the organic phase comprising at least one volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters dD, dP and dH at 25°C which satisfy the following conditions:

$$15\ (J/cm^3)^{1/2} \leq dD \leq 19\ (J/cm^3)^{1/2}$$

$$dP \leq 10\ (J/cm^3)^{1/2}$$

$$dH \leq 10\ (J/cm^3)^{1/2}$$

15. The composition as claimed in one of

claims 11 to 14, wherein the fatty chains represent from 40 to 98% of the total number of the amide units and of the fatty chains.

16. The composition as claimed in one of claims 11 to 15, wherein the fatty chains represent from 50 to 95% of the total number of the amide units and of the fatty chains.

17. The composition as claimed in one of claims 11 to 16, wherein the pendent fatty chains are bonded directly to at least one of the nitrogen atoms of the amide units.

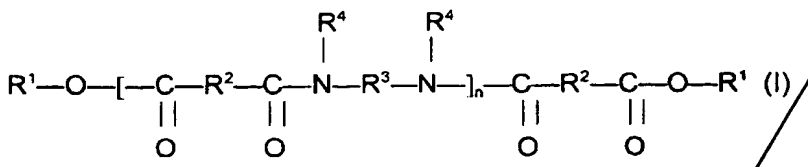
18. The composition as claimed in one of the preceding claims, wherein the weight-average molar mass of the first polymer ranges from 2 000 to 20 000 and better still from 2 000 to 10 000.

19. The composition as claimed in any one of the preceding claims, wherein the end fatty chains are bonded to the backbone via bonding groups.

20. The composition as claimed in claim 19, wherein the bonding groups are ester groups.

21. The composition as claimed in one of the preceding claims, wherein the fatty chains have from 12 to 68 carbon atoms.

22. The composition as claimed in one of the preceding claims, wherein the first polymer is chosen from the polymers of following formula (I) and their blends:



in which n denotes a number of amide units such that the number of ester groups represents from 10% to 50% of the total number of the ester and amide groups; R^1 is, in each case, independently an alkyl or alkenyl group having at least 4 carbon atoms; R^2 independently represents, in each case, a C_4 to C_{42} hydrocarbonaceous group, provided that 50% of the R^2 groups represent a C_{30} to C_{42} hydrocarbonaceous group; R^3 independently represents, in each case, an organic group provided with at least 2 carbon atoms, with hydrogen atoms and optionally with one or more oxygen or nitrogen atoms; and R^4 independently represents , in each case, a hydrogen atom, a C_1 to C_{10} alkyl group or a direct bond to R^3 or to another R^4, so that the nitrogen atom to which both R^3 and R^4 are bonded forms part of a heterocyclic structure defined by R^4-N-R^3, with at least 50% of the R^4 groups representing a hydrogen atom.

23. The composition as claimed in the preceding claim, wherein R^1 is a C_{12} to C_{22} alkyl group.

24. The composition as claimed in either of claims 22 and 23, wherein R^2 are groups having from 30 to 42 carbon atoms.

25. The composition as claimed in one of the

preceding claims, wherein the first polymer is present in a content ranging from 0.1% to 60% by weight with respect to the total weight of the composition, preferably ranging from 0.5% to 30% by weight and better still ranging from 1% to 20% by weight.

26. The composition as claimed in one of claims 1, 2 and 5 to 25, wherein the volatile organic solvent is chosen from volatile organic solvents or mixtures of volatile organic solvents exhibiting mean Hansen solubility parameters dD, dP and dH at 25°C which satisfy the following conditions:

$$15\ (J/cm^3)^{1/2} \leq dD \leq 19\ (J/cm^3)^{1/2}$$

$$dP \leq 10\ (J/cm^3)^{1/2}$$

$$dH \leq 10\ (J/cm^3)^{1/2}$$

27. The composition as claimed in any one of claims 3 to 26, wherein $dP \leq 5\ (J/cm^3)^{1/2}$.

28. The composition as claimed in any one of claims 3 to 27, wherein $dH \leq 9\ (J/cm^3)^{1/2}$.

29. The composition as claimed in any one of claims 3 to 28, wherein dD, dP and dH obey the relationship

$$\sqrt{4(17 - dD)^2 + dP^2 + dH^2} < L$$

L being equal to 10 $(J/cm^3)^{1/2}$ and better still 9 $(J/cm^3)^{1/2}$.

30. The composition as claimed in any one of the preceding claims, wherein the volatile organic

solvent is chosen from the group formed by esters having from 4 to 8 carbon atoms and alkanes having from 6 to 10 carbon atoms.

31. The composition as claimed in any one of the preceding claims, wherein the volatile organic solvent is chosen from the group formed by ethyl acetate, n-propyl acetate, isobutyl acetate, n-butyl acetate and heptane.

32. The composition as claimed in any one of claims 1, 2, 5 to 12 and 15 to 25, wherein the volatile organic solvent is chosen from branched C_8-C_{16} alkanes, branched C_8-C_{16} esters and their mixtures.

33. The composition as claimed in any one of claims 1, 2, 5 to 12 and 15 to 25, wherein the volatile organic solvent is chosen from C_8-C_{16} isoparaffins, isododecane and their mixtures.

34. The composition as claimed in one of the preceding claims, wherein the volatile organic solvent is present in a content ranging from 20% to 98% by weight with respect to the total weight of the composition, preferably from 30% to 90% by weight and better still from 40% to 85% by weight.

35. The composition as claimed in any one of the preceding claims, wherein the liquid organic phase additionally comprises at least one nonvolatile oil.

36. The composition as claimed in one of the preceding claims, wherein the liquid organic phase represents from 5 to 99% of the total weight of the

composition, preferably from 20 to 75%.

37. The composition as claimed in any one of the preceding claims, which comprises a second film-forming polymer.

38. The composition as claimed in claim 37, wherein the second film-forming polymer is chosen from the group formed by cellulose polymers, polyurethanes, acrylic polymers, vinyl polymers, polyvinylbutyrals, alkyd resins, resins resulting from aldehyde condensation products, and arylsulfonamide-epoxy resins.

39. The composition as claimed in claim 37 or 38, wherein the second film-forming polymer is present in a content ranging from 0.1% to 60% by weight with respect to the total weight of the composition, preferably ranging from 2% to 40% by weight and better still from 5% to 25% by weight.

40. The composition as claimed in one of the preceding claims, which comprises at least one additive chosen from coloring materials, antioxidants, preservatives, fragrances, fillers, waxes, neutralizing agents, cosmetic or dermatological active principles, dispersing agents, spreading agents, sunscreens, and their mixtures.

41. The composition as claimed in one of the preceding claims, which is provided in the form of a stiff gel and in particular of an anhydrous stick.

42. The composition as claimed in one of the

preceding claims, which is provided in the form of a stick with a hardness ranging from 30 to 300 g, measured by the "cheesewire" method.

43. A cosmetic process for making up or nontherapeutically treating the nails of human beings, comprising the application, to the nails, of the cosmetic composition in accordance with one of the preceding claims.

44. Use in a nail polish composition, for producing a stick having a hardness ranging from 30 to 300 g, measured by the "cheesewire" method, of a liquid organic phase comprising at least one volatile organic solvent and of a sufficient amount of a first polymer with a weight-average molecular mass of less than or equal to 100 000 comprising a) a polymer backbone having hydrocarbonaceous repeat units which are provided with at least one heteroatom and b) optionally functionalized pendent and/or end fatty chains which have from 6 to 120 carbon atoms and which are bonded to these hydrocarbonaceous units.

45. Use as claimed in the preceding claim, wherein the polymer is a polyamide comprising end groups comprising an ester group comprising a hydrocarbonaceous chain having from 10 to 42 carbon atoms.

46. Use as claimed in claim 44 or 45, wherein the liquid organic phase comprises a volatile organic solvent or a mixture of volatile organic solvents exhibiting mean Hansen solubility parameters

dD, dP and dH at 25°C which satisfy the following conditions:

$$15\ (J/cm^3)^{1/2} \le dD \le 19\ (J/cm^3)^{1/2}$$

$$dP \le 10\ (J/cm^3)^{1/2}$$

$$dH \le 10\ (J/cm^3)^{1/2}$$

47. Use as claimed in one of claims 44 to 46, wherein the volatile organic solvent is chosen from the group formed by ethyl acetate, n-propyl acetate, isobutyl acetate, n-butyl acetate and heptane.

48. Use as claimed in one of claims 44 to 47, wherein the composition comprises a second film-forming polymer.